Application Serial No. 10/825,083 Amendment dated October 31, 2005 Reply to Office Action of May 31, 2005

This listing of the claims replaces any and all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS

Cancel claims 1-23.

- 24. (Original) A water-soluble, hydrophilic adhesive polymer that is free of covalent crosslinks, wherein the polymer is prepared by polymerization of a composition consisting essentially of a hydrophilic monomer and an acrylic acid monomer esterified with a hydrophilic side chain.
- 25. (Original) The polymer of claim 24, wherein the hydrophilic monomer is selected from N-vinyl amides, N-vinyl lactams, vinyl alcohols, vinyl amines, acrylic acids, methacrylic acids, hydroxyalkyl acrylates, hydroxyalkyl methacrylate, vinyl ethers, alkyl acrylates, alkyl methacrylates, acrylamides, N-alkylacrylamides, N,N-dialkylacrylamides, N-hydroxyalkylacrylamides, maleic acids, esters of maleic acids, maleic acid-co-methylvinyl ethers, esters of maleic acid-co-methylvinyl ethers, sulfoalkylacrylates, sulfoalkylmethacrylates; hydroxystyrene, allyl alcohols, crotonic acid, and itaconic acid.
- 26. (Withdrawn **IN ERROR**) The polymer of claim 25, wherein the hydrophilic monomer is an N-vinyl lactam.
- 27. (Withdrawn **IN ERROR**) The polymer of claim 24, wherein the acrylic acid monomer is esterified with a poly(alkylene oxide) chain containing about 4-40 alkylene oxide units.
- 28. (Withdrawn IN ERROR) The polymer of claim 27, wherein the acrylic acid monomer is selected from polyethylene glycol monoacrylate and polyethylene glycol monomethacrylate.

Application Serial No. 10/825,083 Amendment dated October 31, 2005 Reply to Office Action of May 31, 2005

- 29. (Withdrawn IN ERROR) A liquid film-forming composition consisting essentially of a water-insoluble film-forming polymer and the polymer of claim 24.
- 30. (Original) The composition of claim 29, wherein the water-insoluble film-forming polymer is selected from acrylate-based polymers and copolymers, polyvinylacetate, ethylene-vinylacetate copolymers, alkyl cellulose, nitrocellulose, and polysilicones.

Cancel claims 31-37.

38. (Currently amended) A water-soluble, hydrophilic adhesive polymer that is free of covalent crosslinks, having the formula:

g the formula:
$$\frac{--(CR^1H - CR^2)_{m}}{SC} \frac{(CR^3H - CR^4)_{n}}{L^1}$$
Sp

where:

m is an integer in the range of $\theta \underline{1}$ to 100,000;

n is an integer in the range of 1 to 100,000;

R¹, R², R³, and R⁴ are independently selected from hydrogen, lower alkyl, and lower hydroxyalkyl;

SC is a poly(alkylene oxide) side chain containing about 4-20 alkylene oxide units hydrophilic side chain:

L¹ is selected from -(CO)-O-, -O-(CO)-, -O-(CO)-O-, -(CO)-NH-, -NH-(CO)-, -O-(CO)-NH-, -NH-(CO)-O-, -S-S-, -S-(CO)-, and -(CO)-S-;

Sp is a poly(alkylene oxide) linker containing about 4-40 alkylene oxide units; and P* is a polar moiety.

39. (Withdrawn IN ERROR - currently amended) The polymer of claim 38, where: R^1 , R^2 , and R^3 are hydrogen;

R⁴ is selected from hydrogen, methyl, and hydroxymethyl;

SC is a poly(alkylene oxide) side chain containing about 4-20 alkylene oxide

units;

 L^1 is -(CO)-O-; and

P* is a hydroxyl group.

40. (Withdrawn **IN ERROR**) The polymer of claim 38, where m is an integer in the range of 1 to 100,000, and the polymer is prepared by polymerization of a composition consisting essentially of a hydrophilic monomer and an acrylic acid monomer esterified with a hydrophilic side chain.

Cancel claims 41-90.

91. (New) A water-soluble, hydrophilic adhesive polymer that is free of covalent crosslinks, having the formula:

mula:
$$\frac{--(CR^{1}H---CR^{2})}{m} \xrightarrow{(CR^{3}H---CR^{4})}_{n} n$$
SC
$$L^{1}$$
Sp

where:

m is an integer in the range of 0 to 100,000;

n is an integer in the range of 1 to 100,000;

R¹, R², R³, and R⁴ are independently selected from hydrogen, lower alkyl, and lower hydroxyalkyl;

SC is a hydrophilic side chain;

L¹ is selected from -O-(CO)-, -O-(CO)-O-, -(CO)-NH-, -O-(CO)-NH-, -NH-(CO)-O-, -S-S-, -S-(CO)-, and -(CO)-S-;

Sp is a poly(alkylene oxide) linker containing about 4-40 alkylene oxide units; and P* is a polar moiety.